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United States
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Agriculture

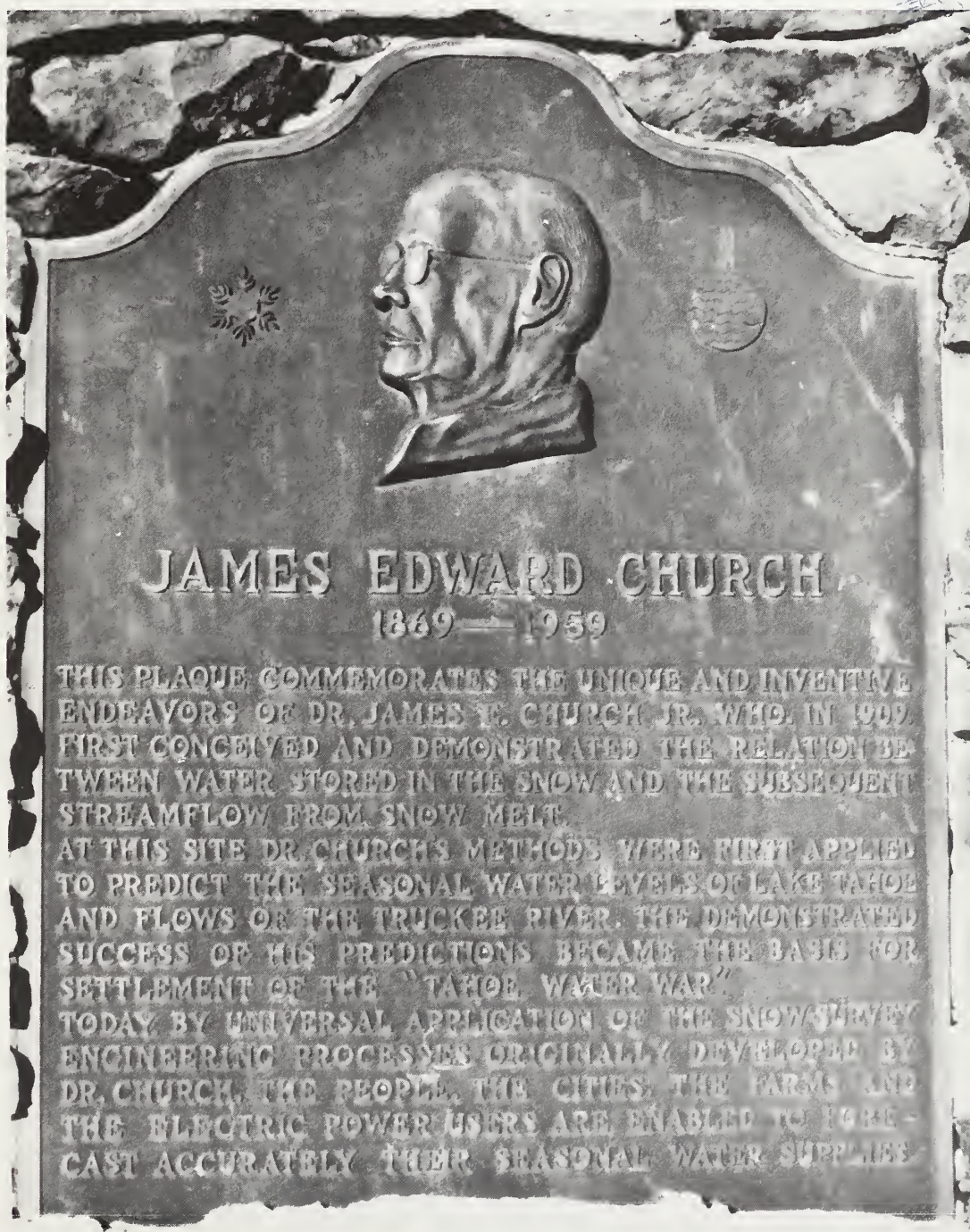
Soil
Conservation
Service

Boise,
Idaho



Idaho Water Supply Outlook

March 1, 1989



Foreword

How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Soil Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

An error is associated with each forecast, and this error decreases as the season progresses and more data becomes available. To express the range of error that can be expected, "most probable" forecasts are issued along with a range representing a "reasonable minimum" and a "reasonable maximum". Actual streamflow can be expected to fall within this range in eight out of ten years. Additionally two specific scenarios are provided based on the assumption that subsequent precipitation will be "wet", above average, or "dry", below average.

For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola Ave., Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Building A, 3rd floor, Denver, CO 80211
Idaho	3244 Elder Street, Room 124, Boise, ID 83705
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	W. 920 Riverside, Room 360, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 "B" Street, Room 3124, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209-3489.

Water supply reports published by other agencies:

California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

Idaho Water Supply Outlook

and

Federal — State — Private Cooperative Snow Surveys

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COVER: This plaque on the outlet gate at Lake Tahoe, Nevada,
commemorates the start of snow surveys in 1909.

"Programs and assistance of the United States Department of Agriculture are
available without regard to race, creed, color, sex, age, or national origin."

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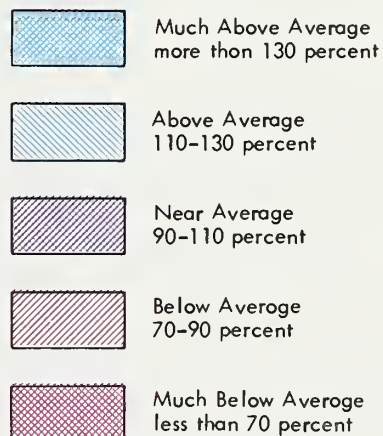
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STREAMFLOW PROSPECTS IDAHO

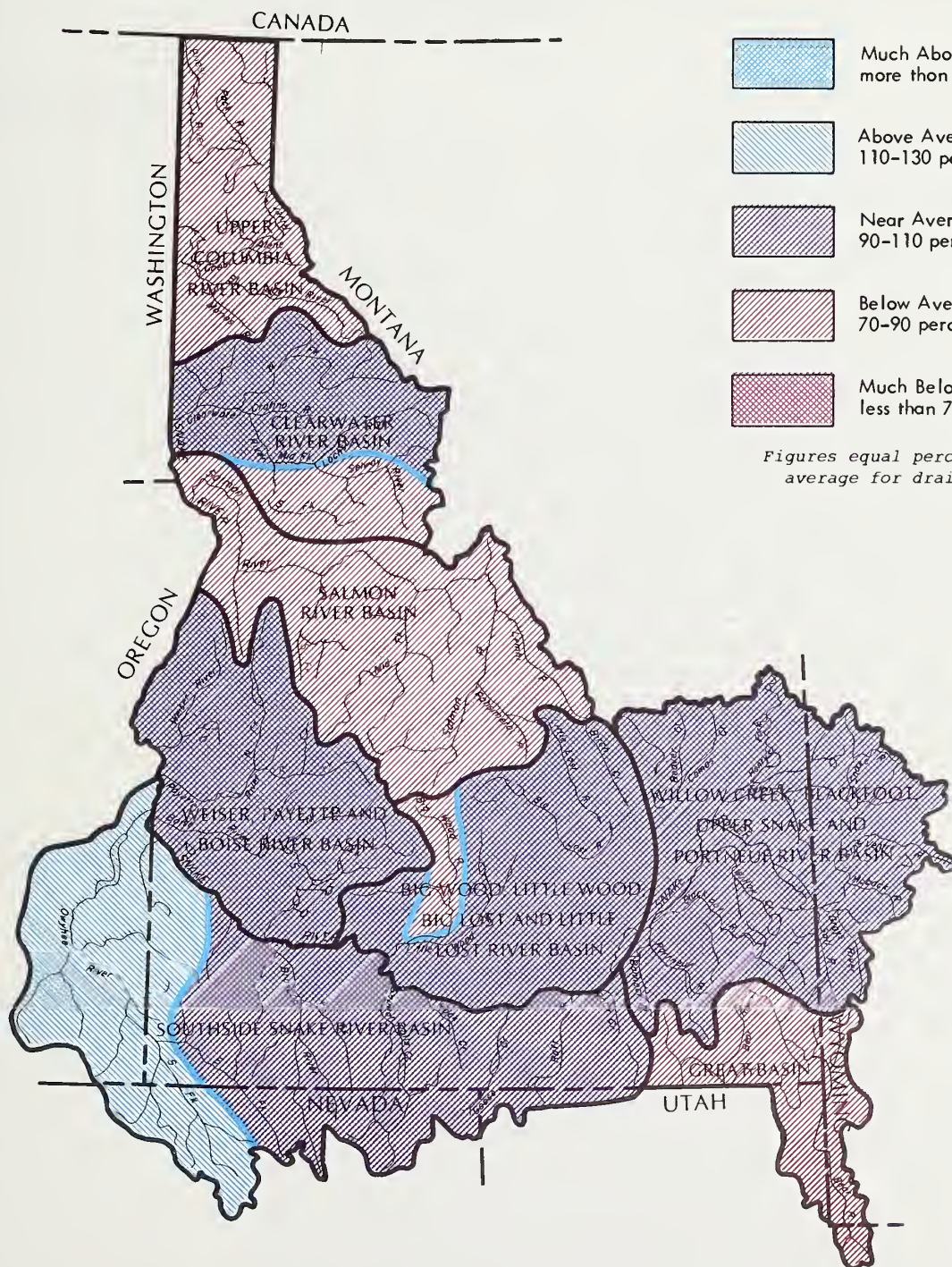
0 25 50 75 100 MI

0 50 100 150 KM

LEGEND



*Figures equal percent of
average for drainage.*



GENERAL OUTLOOK

SUMMARY:

DESPITE BELOW NORMAL SNOWFALL IN FEBRUARY, IDAHO'S MOUNTAIN SNOWPACK STILL HOVERS AROUND NORMAL AS WE ENTER THE LAST MAJOR SNOW ACCUMULATION PERIOD OF THE WINTER. WITH OVER 80 PERCENT OF THE WINTER BEHIND US, WATER USERS CAN FEEL CONFIDENT OF ADEQUATE WATER SUPPLIES IN MOST AREAS OF THE STATE. NORMAL SNOWFALL IN MARCH, COUPLED WITH NORMAL SPRING AND SUMMER PRECIPITATION PATTERNS, SHOULD TURN THIS OPTIMISTIC OUTLOOK INTO REALITY.

SNOWPACK:

February brought below normal snow accumulation over much of the state, and the March 1 snow surveys indicate snowpack conditions have decreased slightly in comparison to normal during the month. Snowpacks now range from slightly above to slightly below normal across most of the state. Several low elevation basins continue to report above to well above normal snowpacks. North Idaho snowpacks are slightly below normal, ranging from 84% of average on the Salmon River basin to 93% on the N.F. Clearwater. Exceptions to this are in the low elevation basins near Coeur d'Alene and Moscow where snowpacks are well above average. The central Idaho mountains report snowpacks hovering around the average mark for this time of year, ranging from 87% on the Big Wood basin to 113% on the Camas Creek drainage. In eastern Idaho and western Wyoming, snowpacks range from 90 to 117% of average except on the Salt River and Willow Creek drainages where snowpacks are 87 and 131%, respectively. Snowpacks on the south side of the Snake remain near to well above average, ranging from 101% on the Raft River to 139% on the Owyhee. The Great Basin area improved slightly during February, and snowpacks now range from 86% of normal on the Bear River to 107% on the Malad River.

RESERVOIRS:

Storage levels remain below to well below normal on most reservoirs across the state as of March 1. However, storage is improving slowly as many reservoir operators continue to store maximum allowable water. Twenty-six key reservoirs across the state report a combined storage of 70% of normal and 45% of capacity, ranging from a low of 22% of average (12% of capacity) in Magic Reservoir to 104% of average (58% of capacity) in Cascade Reservoir. Most smaller reservoirs are still expected to fill even though Apr-July streamflow forecasts have decreased slightly since last month. Some of the larger reservoir systems may fall short of filling but should provide adequate water supplies to meet user needs, assuming normal precipitation is received during the spring and early summer runoff period.

PRECIPITATION:

February began very dry throughout Idaho with the exception of the southeast corner of the state. By the middle of the month a series of wet Pacific storms began to track across southern Idaho, and many of the valley stations ended up above normal for the month. For the remainder of the state, precipitation fell well short of average. North Idaho ranged from 20% of normal precipitation at Sandpoint to 61% at Pierce. Central Idaho was also well below normal except for Grangeville with 114%, and Salmon with 102%. Otherwise, averages ranged from 43% at Dixie to 79% at Fenn Ranger Station. Southern Idaho stations were generally above normal except for the Magic Valley and a few stations in the extreme southeast corner. February precipitation ranged from 107% of normal at Boise to 196% at Idaho Falls. On the low side, Twin Falls reported only 57% of normal. The state as a whole averaged only 66% of normal. February was very cold due to a very strong Arctic outbreak during the first ten days of the month. Many temperature records were broken during this period of extreme cold. Boise averaged the coldest with a departure of 12.9 degrees below normal. Lewiston averaged a minus 11.9 degrees.

STREAMFLOW:

Most volume streamflow forecasts have been lowered slightly from last month to reflect the below normal snow accumulation during February. However, the water supply outlook for the 1989 season continues to look optimistic with most basins expected to produce near or only slightly below normal runoff. In north Idaho, Apr-Sept streamflow forecasts now range from 86 to 92% of normal runoff. In the central part of the state, streamflow projections range from 85 to 95% of normal while basins in eastern Idaho and western Wyoming are forecast to yield between 98 and 108% of normal flows. Basins on the south side of the Snake show the best prospects in the state, ranging from 106% of normal for inflow to Oakley Reservoir to 118% for the inflow to Owyhee Reservoir.

In the Bear River basin, forecasts improved slightly on tributaries in the northern part of the drainage while the Bear River mainstem decreased slightly. Apr-Sept streamflow forecasts for this area now range from 73% of normal for the Bear at Harer to 89% on the Cub River near Preston.

RECREATIONAL OUTLOOK:

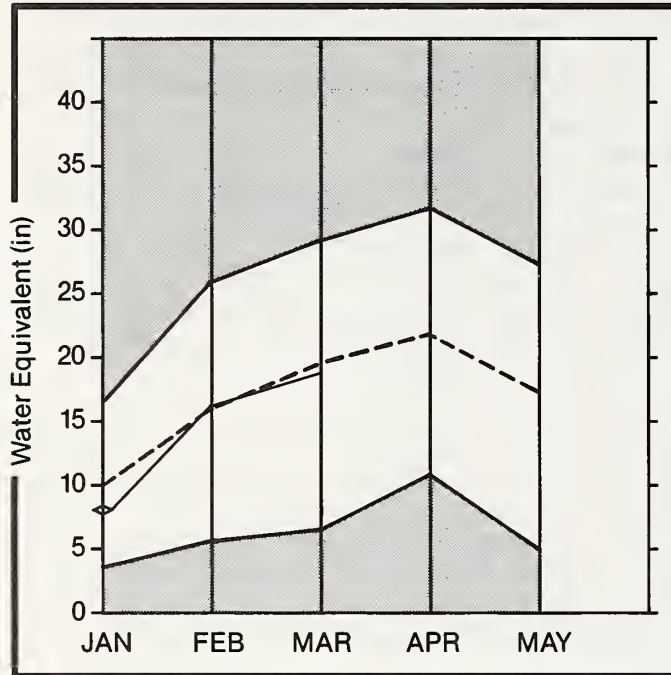
Outdoor enthusiasts can still expect near normal streamflows this spring and summer, according to March 1 snow surveys. The arctic cold wave and below normal precipitation of February resulted in a drop in most basin snowpacks of about 10%, in terms of percent of normal. Spring-like temperatures in March will bring some runoff and recreation opportunities as the low elevation snowpack melts in the Owyhee River basin in southwestern Idaho. Elsewhere, spring weather will be the major factor in determining the timing of snowmelt runoff. Above 7000 feet, the mountain soils are dry, indicating that little or no snowmelt has occurred. Floaters can continue to smile and tune up their gear as most whitewater river basins can expect near or above normal streamflow.

SOIL MOISTURE:

Soil moisture conditions have not changed significantly over the winter and most soils continue to have below normal moisture. Mountain soils throughout the state are not frozen, due to the deep winter snowpack, but remain very dry. In the lower elevations, soil moisture conditions have improved with recent snowmelt and rain but remain drier than normal. Some low elevation soils, however, are frozen and have absorbed little moisture. Above normal amounts of this spring's snowmelt will be absorbed into the soil profile to recharge the dry soils. The degree of water loss into the soils will be dependent upon spring weather conditions. Early, slow snowmelt, such as occurred in 1987, will result in high losses to the soil.

Upper Columbia Basin

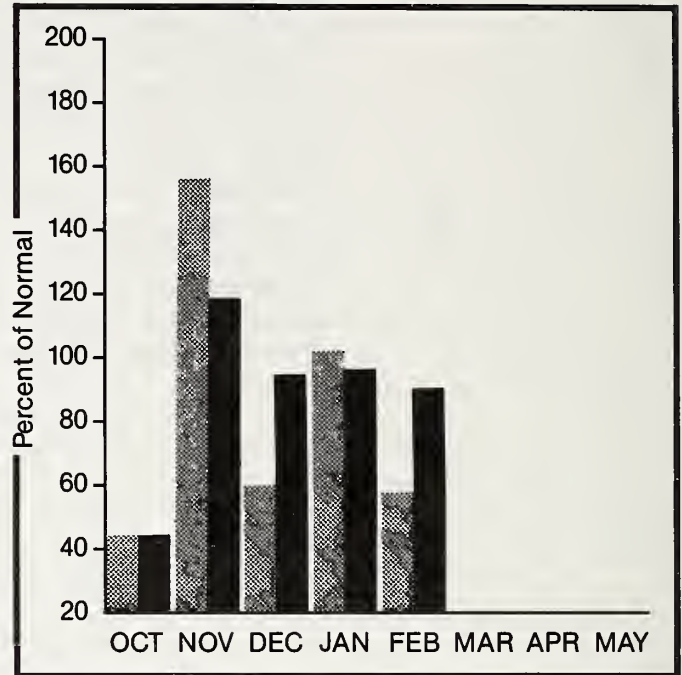
Mountain snowpack* (inches)



*Based on selected stations

Maximum Average
Minimum Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation Year to date precipitation

WATER SUPPLY OUTLOOK:

In comparison to normal, basin snowpack conditions have dropped somewhat from the figures reported Feb 1 and are now slightly below normal on most major basins. Snowpacks range from 82% of average on the Moyie River basin to 92% on the Priest River. Snowpacks in the low elevations, however, are reported to be well above normal with most snow courses reporting over 150% of average snowpack. Lower elevation basins in the Coeur d'Alene and Moscow areas are expected to produce above normal snowmelt flows from snowpacks ranging from 117% on Rathdrum Creek to 165% on the Palouse River. Elsewhere, Apr-Sept streamflow volumes are forecast to be slightly below normal, ranging from 86% of average on the Spokane River to 90% on the Priest and Coeur d'Alene Rivers. Carryover storage in the major lakes and reservoirs remains below to well below normal, ranging from 41 to 81% of average.

UPPER COLUMBIA RIVER BASIN

STREAMFLOW FORECASTS

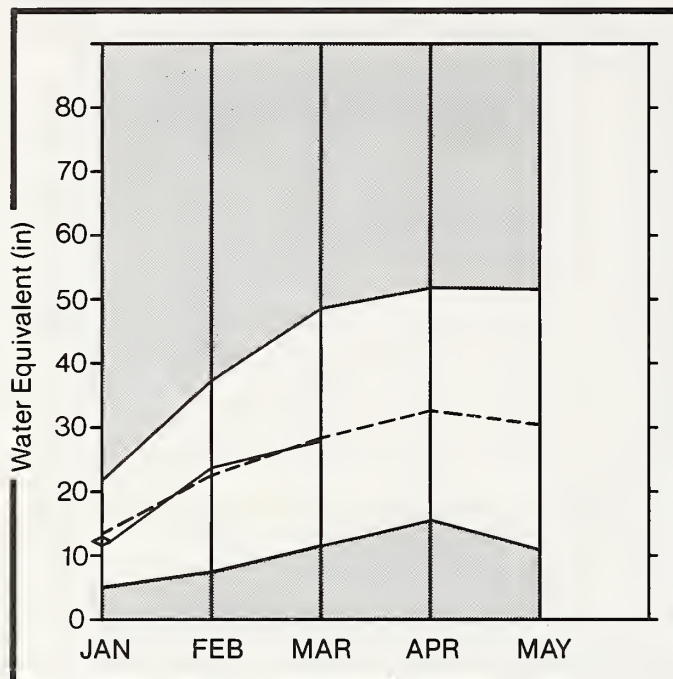
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
KOOTENAI at Leona (2)	APR-SEP	7440	88			9130	5750	8441
	APR-JUL	6470	88			7940	5000	7340
	APR-JUN	5190	88			6370	4010	5899
CLARK FORK at Whitehorse Rapids (2)	APR-SEP	11800	88			14900	8720	13370
	APR-JUL	10700	88			13500	7910	12150
	APR-JUN	9120	88			11500	6740	10360
PEND OREILLE LAKE inflow (2)	APR-SEP	13200	88			16500	9920	14930
	APR-JUL	12100	89			15100	9100	13650
	APR-JUN	10400	88			13000	7810	11780
PRIEST nr Priest River (2)	APR-SEP	805	90			1040	575	893
	APR-JUL	755	90			975	535	838
COEUR D'ALENE at Enaville	APR-SEP	750	90			1130	370	830
	APR-JUL	700	89			1080	345	789
SPOKANE nr Post Falls (2)	APR-SEP	2420	86	2840	2030	3350	1490	2820
	APR-JUL	2340	86	2780	1900	3240	1440	2723
ST. JOE at Calder	APR-SEP	1130	88	1310	975	1440	825	1281
	APR-JUL	1060	88	1230	915	1350	770	1211

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG '0	THIS YEAR AS % OF LAST YR. AVERAGE
HUNGRY HORSE	3451.0	1296.0	1400.0	2257.0	Kootenai ab Bonners Ferry	54	130 83
FLATHEAD LAKE	1791.0	774.0	889.0	901.0	Moyie River	3	135 82
PEND OREILLE	1561.2	545.4	560.4	831.8	Pend Oreille River	161	126 88
NOXON RAPIDS	335.0	260.5	321.6	297.6	Clark Fork River	111	118 86
COEUR D'ALENE	291.2	91.2	102.2	220.9	Priest River	6	132 92
PRIEST LAKE	97.7	27.8	44.8	34.4	Rathdrum Creek	2	154 117
					Hayden Lake	4	260 156
					Coeur d'Alene River	10	134 89
					St. Joe River	9	128 85
					Spokane River	23	139 91
					Palouse River	2	347 174

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
 REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
 (1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.
 (2) - Corrected for upstream diversions or changes in reservoir storage.

Clearwater River Basin

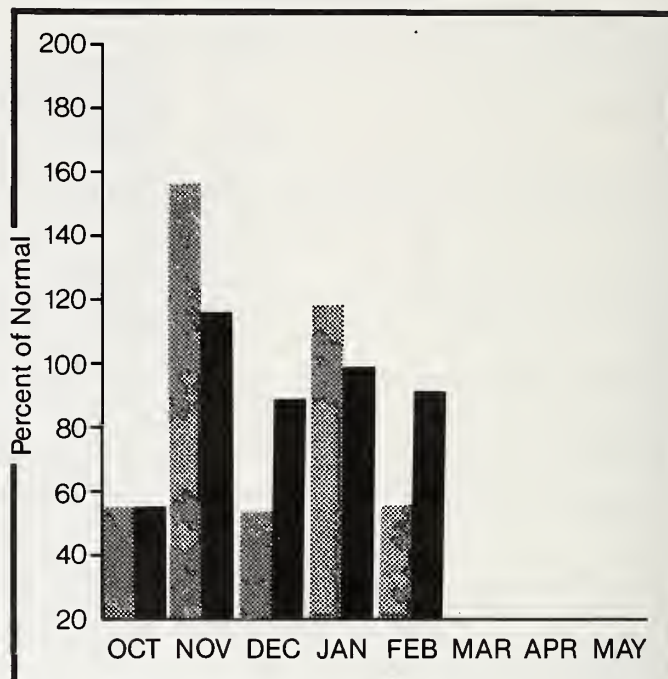
Mountain snowpack* (inches)



*Based on selected stations

Maximum ——— Average - - - -
Minimum ——— Current ◇ ———

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation Monthly precipitation Year to date precipitation

WATER SUPPLY OUTLOOK:

Snowpacks on the Clearwater basin are slightly below normal for March 1 with basin snowpacks ranging from 86 to 93% of average. These figures indicate a 6-8% decrease in comparison to normal from those reported a month ago. Lower elevation snow courses in the Moscow, Bovill, and Pierce areas however, continue to report above to well above normal snowpacks, ranging from 125 to 160% of normal snow accumulation. Small tributaries in these areas are expected to produce above normal snowmelt flows while the Clearwater mainstem is forecast to be slightly below normal. Storage in Dworshak Reservoir was lowered approximately 200,000 Ac-Ft for power generation during the extremely cold period in late January and early February, and is currently at 85% of average and 51% of capacity.

For more information contact your local Soil Conservation Service office.

CLEARWATER RIVER BASIN

STREAMFLOW FORECASTS

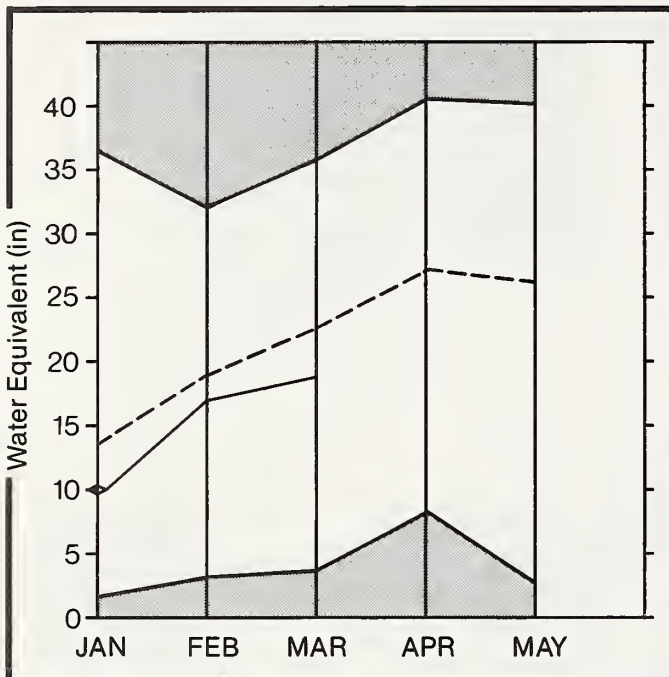
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
OWORSHAK RESERVOIR inflow	APR-SEP	2720	90			3710	1730	3010
	APR-JUL	2530	90			3460	1600	2822
CLEARWATER at Orofino	APR-SEP	4740	92			6390	3140	5163
	APR-JUL	4510	92			6030	2950	4889
CLEARWATER at Spalding	APR-SEP	7650	91			10200	5140	8378
	APR-JUL	7270	92			9640	4900	7916

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
OWORSHAK	3467.8	1776.4	1835.2	2084.1	North Fork Clearwater	12	134	93
					Lochsa River	5	118	91
					Selway River	6	106	86
					Clearwater River	20	126	91

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Salmon River Basin

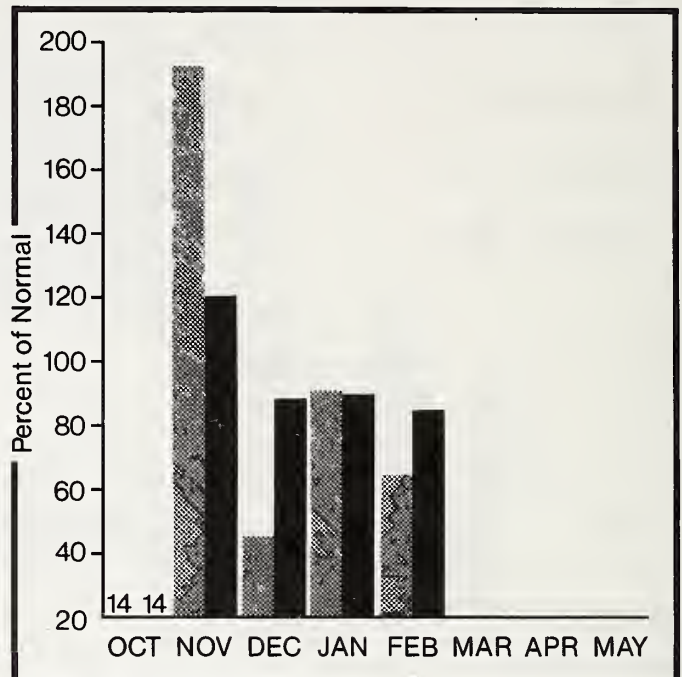
Mountain snowpack* (inches)



*Based on selected stations

Maximum Average
Minimum Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation Year to date precipitation

WATER SUPPLY OUTLOOK:

Snowpack conditions in the Salmon basin show a slight decrease in comparison to normal from those reported a month ago. Basin snowpacks now range from 82 to 84% of average. Apr-Sept streamflow volumes are expected to be slightly below normal, and should provide good flows for whitewater boating and other recreational uses this spring and summer.

For more information contact your local Soil Conservation Service office.

SALMON RIVER BASIN

STREAMFLOW FORECASTS

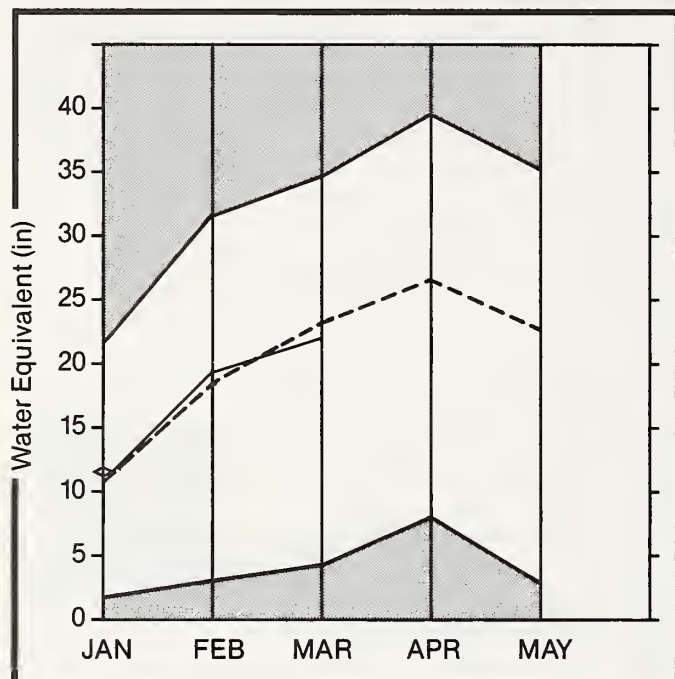
FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS.- (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
SALMON at Salmon	APR-SEP	930	86			1320	530	1077
	APR-JUL	790	86			1120	460	919
SALMON at White Bird	APR-SEP	6030	86			7920	4070	7007
	APR-JUL	5440	86			7150	3730	6322

RESERVOIR STORAGE					(1000AF)	WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE		** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
	CAPACITY		THIS	LAST	AVG.			LAST YR.	AVERAGE
			YEAR	YEAR		Salmon River ab Salmon	11	124	82
						Lemhi River	12	112	84
						Salmon River Total	34	122	84

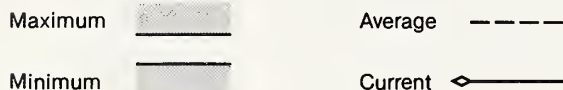
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Weiser, Payette, and Boise River Basin

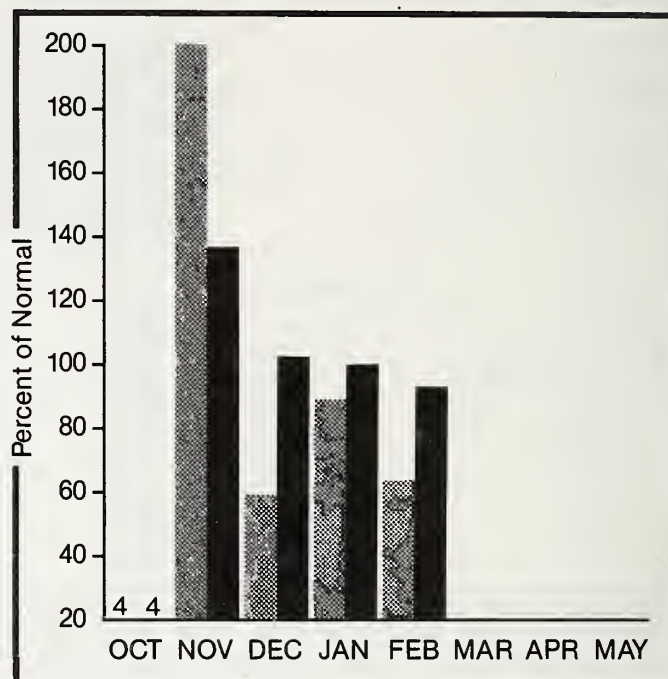
Mountain snowpack* (inches)



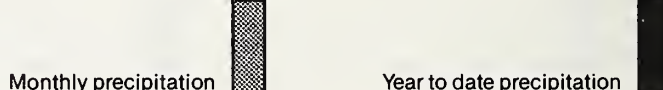
*Based on selected stations



Precipitation* (percent of normal)



*Based on selected stations



WATER SUPPLY OUTLOOK:

Basinwide snowpack conditions have dropped 5 to 15% in comparison to normal from figures reported near Feb 1 but remain near average, ranging from 90% of normal on the Middle Fork of the Boise to 105% on the Weiser River. Exceptions to these are the Mann Creek watershed near Weiser and the Canyon Creek basin near Mountain Home which report 128 and 146% respectively. In general, higher elevation stations report near to slightly below normal snowpacks while lower elevation stations report above to well above normal snow water content. Apr-Sept streamflow projections have been reduced slightly from last month but remain near normal, ranging from 90 to 95% of average. Reservoirs continue to fill with available flows, but carryover storage remains below to well below normal in all systems except Cascade Reservoir, which reports 104% of normal storage. Although some major reservoirs may not fill to capacity, water supplies are expected to be adequate to meet user needs for the 1989 irrigation season.

WEISER, PAYETTE, AND BOISE RIVER BASIN

STREAMFLOW FORECASTS

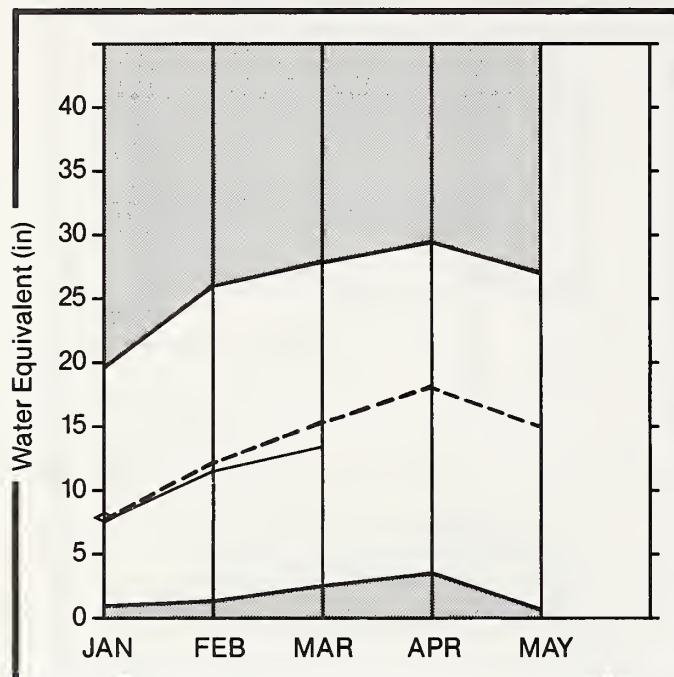
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WEISER nr Weiser	APR-SEP	420	95			640	194	444
	APR-JUL	390	94			595	179	414
NF PAYETTE at Cascade (2)	APR-SEP	515	91	520	515	610	420	568
	APR-JUL	480	90	490	475	570	395	531
NF PAYETTE nr Banks (2)	APR-SEP	670	91	760	580	845	495	737
	APR-JUL	630	91	720	540	795	465	691
PAYETTE nr Horseshoe Bend	APR-SEP	1680	90	1850	1570	2070	1290	1862
	APR-JUL	1550	90	1690	1410	1910	1190	1717
SF PAYETTE at Lowman	APR-SEP	470	91	500	440	580	360	516
	APR-JUL	415	91	445	385	510	320	458
DEADWOOD RESERVOIR inflow	APR-JUL	130	91			161	99	143
BOISE nr Twin Springs (1)	APR-SEP	675	93	740	610	820	530	722
	APR-JUL	620	93	685	555	755	485	664
BOISE nr Boise (1)	APR-SEP	1480	91	1680	1300	1940	1040	1628
	APR-JUL	1370	91	1570	1200	1780	980	1508
	APR-JUN	1210	91	1370	1060	1580	865	1334
SF BOISE at Anderson Ranch Dam (1)	APR-SEP	555	90	625	500	675	445	619
	APR-JUL	520	90	585	475	630	410	578

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
MANN CREEK	11.3	3.4	2.8	6.8	Mann Creek	4	212 128
CASCADE	703.2	407.6	363.1	393.8	Weiser River	8	173 105
DEADWOOD	162.0	61.7	67.7	84.5	North Fork Payette	9	139 90
ANDERSON RANCH	464.2	129.6	123.1	282.1	South Fork Payette	7	144 91
ARROWROCK	286.6	168.0	156.6	234.8	Payette River Total	16	141 91
LUCKY PEAK	307.0	70.5	116.3	122.5	Middle & North Fork Boise	7	136 90
LAKE LOWELL (DEER FLAT)	177.0	87.2	88.9	140.6	South Fork Boise River	9	155 100
					Boise River Total	18	161 104
					Canyon Creek	2	204 146

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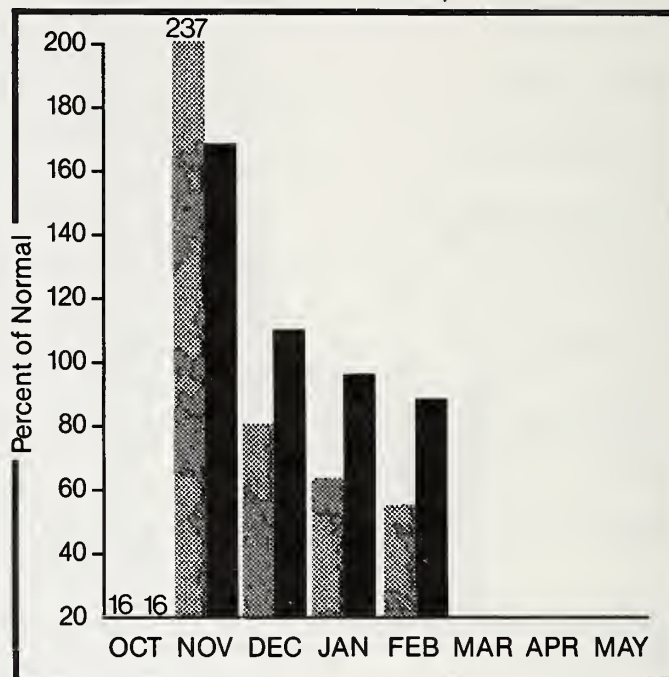
Big Wood, Little Wood, Big Lost, and Little Lost River Basin

Mountain snowpack* (inches)



*Based on selected stations

Precipitation* (percent of normal)



*Based on selected stations

Maximum Average
Minimum Current

Monthly precipitation Year to date precipitation

WATER SUPPLY OUTLOOK:

In comparison to normal, March 1 basin snowpack figures dropped slightly from those reported a month ago, but conditions remain near normal for this time of year. Currently, snowpacks range from 87% of average on the Big Wood mainstem to 113% on the Camas Creek drainage near Fairfield. Higher elevation sites report near to slightly below average snowpacks while lower elevation stations are showing near to above average conditions. Apr-Sept streamflow projections also dipped slightly from those issued last month and remain near to slightly below normal, ranging from 85 to 93% of average. Storage volumes in the major reservoirs remain low, ranging from 22% of average (12% of capacity) in Magic Reservoir to 73% of average (53% of capacity) in Mackay Reservoir. Water supplies should be adequate to meet user needs in most watersheds.

BIG WOOD, LITTLE WOOD, BIG LOST, AND LITTLE LOST RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
BIG WOOD nr Bellevue	APR-SEP APR-JUL	184 172	85 85	205 192	160 150	240 225	128 119	217 202
MAGIC RESERVOIR inflow	APR-SEP APR-JUL	295 280	87 87	320 305	270 255	440 420	150 142	338 322
LITTLE WOOD nr Carey	APR-SEP APR-JUL	96 89	90 90	109 101	84 77	126 117	66 61	107 99
BIG LOST at Howell Ranch nr Chilly	APR-SEP APR-JUL APR-JUN	200 177 136	91 92 92	220 194 148	180 160 124	275 240 186	126 112 86	219 192 148
BIG LOST b1 Mackay Reservoir (2)	APR-SEP	172	88	192	154	240	106	195
LITTLE LOST b1 Wet Ck.	APR-SEP APR-JUL	36 29	93 92	42 34	32 25	50 41	22 17.4	39 31
LITTLE LOST nr Howe	APR-SEP APR-JUL	40 30	91 91	44 33	37 28	55 41	25 19.1	44 33

RESERVOIR STORAGE (1000AF)

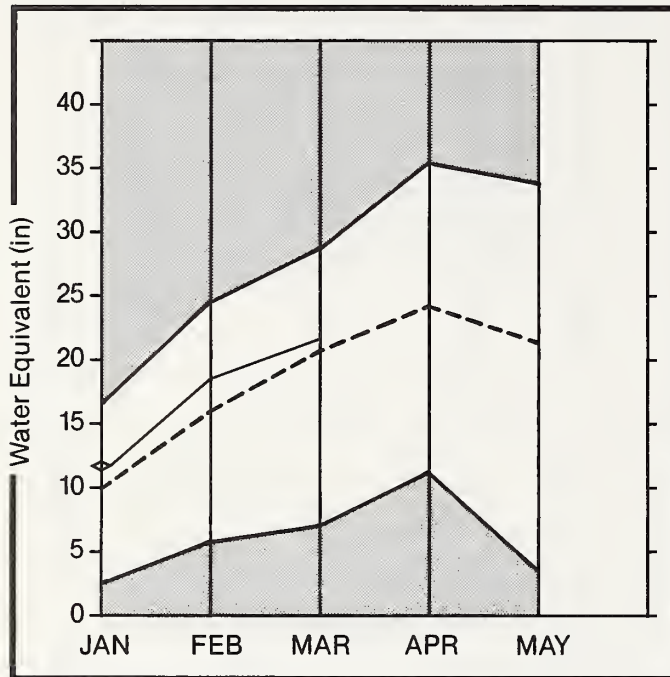
WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE	
		THIS YEAR	LAST YEAR	AVG.				
MAGIC	191.5	22.7	23.6	102.4	Big Wood ab Magic	10	149	87
LITTLE WOOD	30.0	12.2	14.6	17.6	Camas Creek	5	194	113
CAREY VALLEY		NO REPORT			Big Wood Total	15	160	94
MACKAY	44.5	23.8	26.7	32.6	Little Wood River	3	183	95
					Fish Creek	3	206	106
					Big Lost River	8	151	90
					Little Lost River	4	124	95





WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
 REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
 (1) - REAS. MAX. and REAS. MIN. forecasts are for 5% and 95% exceedance levels.
 (2) - Corrected for upstream diversions or changes in reservoir storage.

Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

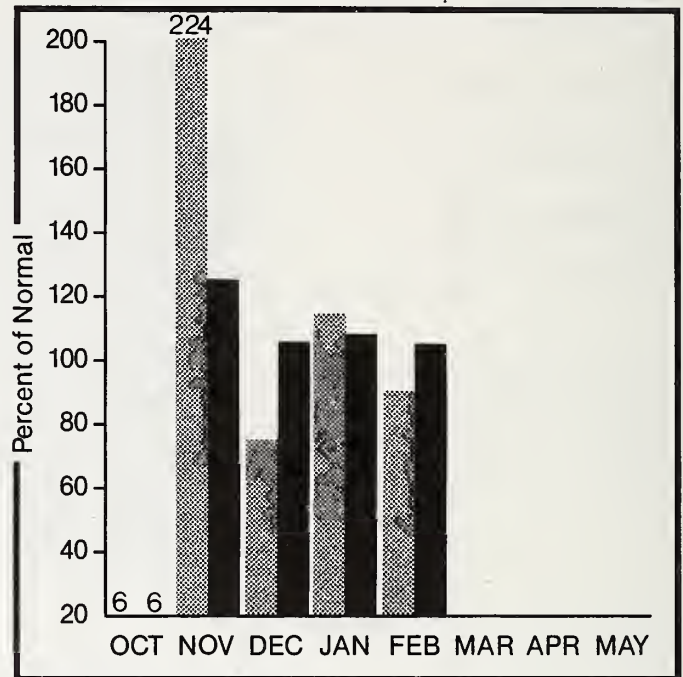
Mountain snowpack* (inches)





*Based on selected stations

Maximum  Average 
Minimum  Current 

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation  Year to date precipitation 

WATER SUPPLY OUTLOOK:

Snowpacks in several basins (Beaver-Camas, Henry's Fork, Teton, and Upper Snake above Moran) show a 10-20% drop in comparison to normal from a month ago. Still, snow conditions remain near to slightly above normal on all major basins, ranging from 87% of average on the Salt River to 131% on the Willow Creek basin. Most watersheds report between 90-110% of average snowpack. Apr-Sept streamflow prospects have lowered somewhat to reflect the change in snowpack conditions but remain near normal, ranging from 98 to 108% of average. Reservoir storage continues to improve but remains below normal, ranging from 58 to 87% of average. The combined storage for the eight major reservoirs in the Upper Snake basin is 65% of normal and 50% of capacity. Current conditions indicate water supplies should be good for the coming season.

WILLOW CREEK, BLACKFOOT, UPPER SNAKE, AND PORTNEUF RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
HENRYS FORK nr Ashton (2)	APR-SEP APR-JUL	755 565	101 101	800 605	725 525	830 620	690 510	746 557
HENRYS FORK nr Rexburg (2)	APR-SEP APR-JUL	1580 1250	99 99	1680 1340	1480 1160	1870 1480	1290 1010	1595 1260
FALLS nr Squirrel	APR-JUL	380	102			450	310	373
TETON ab S Leigh Ck nr Origgs	APR-SEP APR-JUL	190 142	98 98	210 158	171 126	215 161	165 123	194 145
TETON nr St. Anthony	APR-SEP APR-JUL	475 385	99 99	500 410	450 360	535 435	415 335	479 387
SNAKE nr Moran (1)	APR-SEP	960	108	1010	905	1080	835	888
PALISADES RESERVOIR inflow (1)	APR-SEP	3880	101	4070	3730	4770	3030	3852
SNAKE nr Heise (2)	APR-SEP APR-JUL	4140 3520	100 100	4470 3840	3810 3200	5050 4300	3270 2780	4142 3524
SNAKE nr Blackfoot (2)	APR-SEP APR-JUL	5620 4530	99 99	6070 4990	5170 4070	6700 5400	4540 3700	5680 4589
PORTNEUF at Topaz	MAR-SEP MAR-JUL	109 88	100 100	117 93	100 80	148 120	70 56	109 88

RESERVOIR STORAGE

(1000AF)

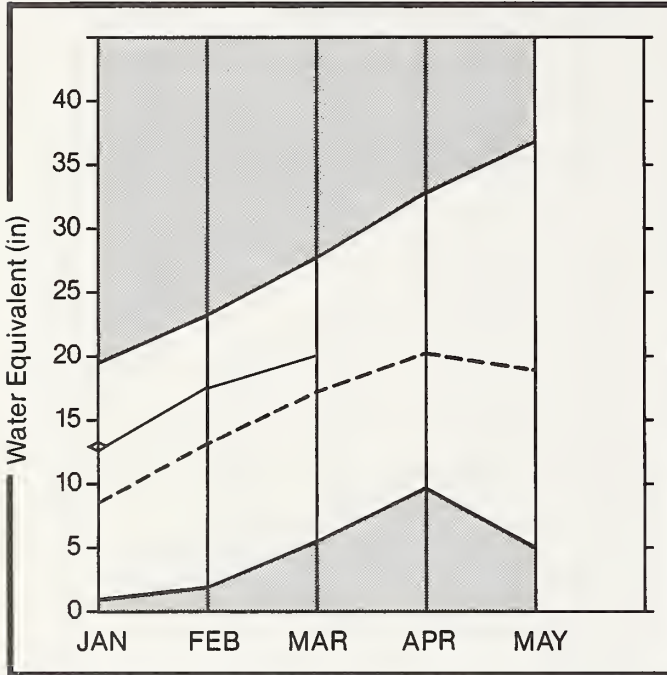
WATERSHED SNOWPACK ANALYSIS

RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'0	THIS YEAR AS % OF LAST YR.	OF AVERAGE
ISLAND PARK	127.6	81.5	118.2	110.1	Camas-Beaver Creeks	6	206	117
GRASSY LAKE	15.2	9.0	9.2	10.9	Henrys Fork River	13	142	113
JACKSON LAKE	624.4	119.0	96.1	535.9	Teton River	9	133	106
PALISADES	1357.0	597.2	835.3	1028.0	Snake above Palisades	31	127	99
AMERICAN FALLS	1700.0	1112.2	1350.9	1277.2	Snake above Jackson Lake	9	121	104
BROWNLEE	975.3	432.5	601.1	531.0	Gros Ventre River	3	134	100
BLACKFOOT	348.7	153.0	251.1	242.1	Greys River	5	119	90
HENRY'S LAKE	90.4	67.3	78.1	79.4	Salt River	7	128	87
RIRIE	96.5	42.6	49.8	51.3	Willow Creek	9	181	131
					Blackfoot River	9	156	105
					Portneuf River	13	163	106
					Toponce Creek	3	175	109

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
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Southside Snake River Basin

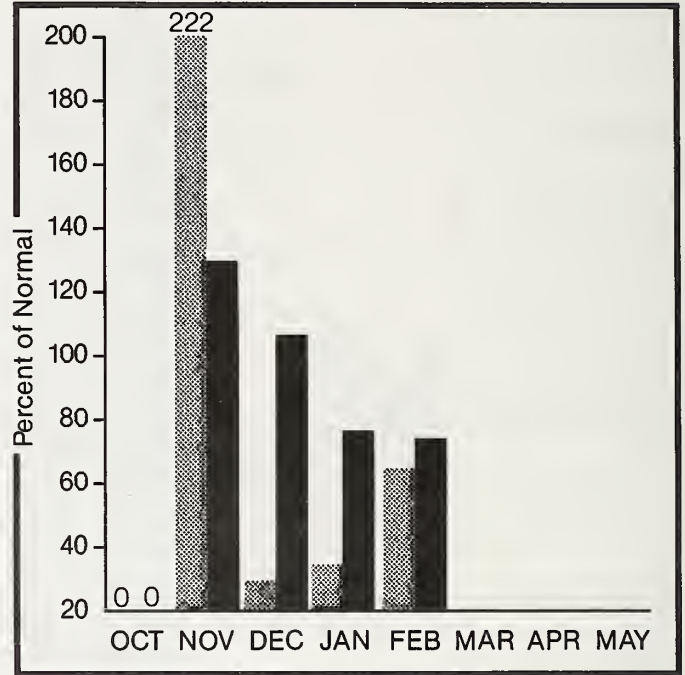
Mountain snowpack* (inches)



*Based on selected stations

Maximum ———
Minimum ———
Average - - - -
Current ◇ ———

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation [stippled bar]
Year to date precipitation [solid black bar]

WATER SUPPLY OUTLOOK:

Snowpack conditions remain near or above normal on the South side of the Snake, in spite of a 15 to 30% drop in percent of average from last month. Snowpacks now range from 101% of average on the Raft River to 139% on the Owyhee basin. Mar-Sept and Apr-Sept streamflow projections have been reduced for the second consecutive month and are now near to slightly above normal. Forecasts currently range from 105% on the Owyhee near Owyhee to 118% for the inflow to Owyhee Reservoir. Reservoir storage in Owyhee Reservoir increased by 53,000 acre-feet during February but is currently only 28% of average and 19% of capacity. Oakley and Salmon Falls reservoirs show 41 and 44% of average storage respectively. Water supplies look good for the Bruneau and Owyhee basins. Irrigation supplies on the Salmon Falls and Oakley systems should be much better than last year, but may fall short of full allotments.

SOUTHSIDE SNAKE RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
OAKLEY RESERVOIR inflow	APR-SEP	35	106	36	34	47	24	33
	APR-JUL	32	108	33	31	42	22	30
SALMON FALLS CK nr San Jacinto	MAR-SEP	109	107	121	97	147	71	102
	MAR-JUL	105	108	119	91	140	68	97
	MAR-JUN	98	108	110	85	131	64	91
BRUNEAU nr Hot Spring	MAR-SEP	280	108	315	255	380	179	260
	MAR-JUL	265	107	295	235	360	171	248
OWYHEE nr Gold Ck (2)	MAR-JUL	35	106			52	17.5	33
OWYHEE nr Owyhee (2)	APR-JUL	90	105	116	64	136	44	86
OWYHEE nr Rome (2)	MAR-JUL	610	115	630	585	875	345	532
OWYHEE RESERVOIR inflow (1)	APR-SEP	535	118	545	525	705	330	455
	MAR-JUL	670	113	695	645	910	435	591

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
OAKLEY	77.4	12.3	12.9	29.9	Raft River	9	153 101
SALMON FALLS	182.6	23.7	38.8	53.9	Goose-Trapper Creeks	6	157 104
OWYHEE	715.0	134.1	219.4	486.6	Salmon Falls Creek	11	151 108
					Bruneau River	11	162 121
					Owyhee River	16	167 135

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.

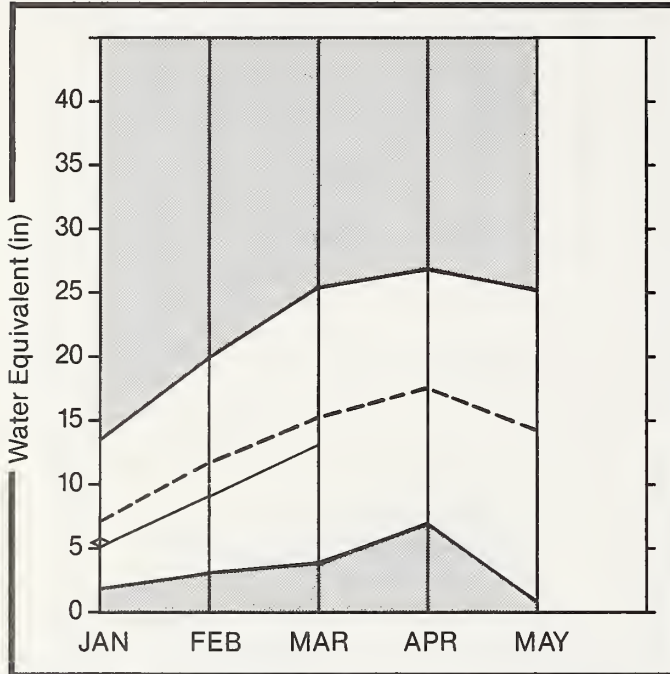
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(2) - Corrected for upstream diversions or changes in reservoir storage.

Great Basin

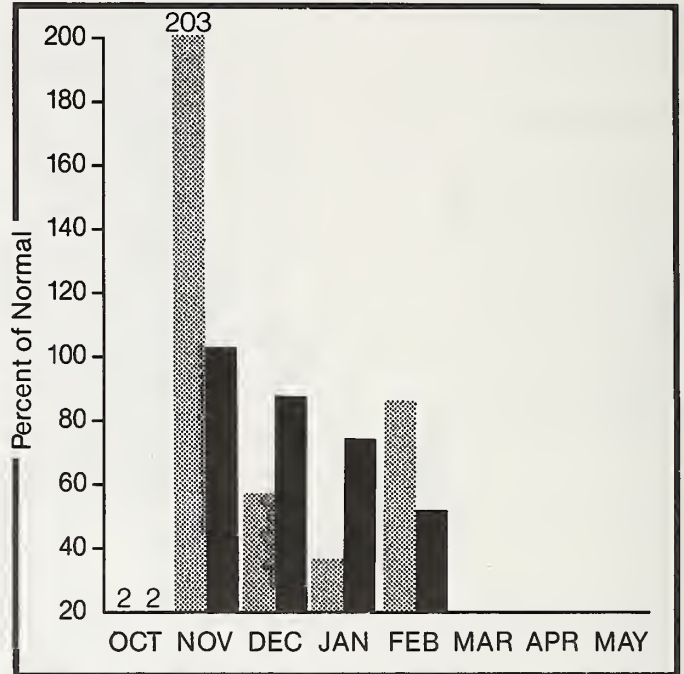
Mountain snowpack* (inches)



*Based on selected stations

Maximum Average
Minimum Current

Precipitation* (percent of normal)



*Based on selected stations

Monthly precipitation Year to date precipitation

WATER SUPPLY OUTLOOK:

The Great Basin is the only area in the state to report a general improvement in snowpack conditions during February. Snowpacks, however, still remain near to slightly below normal, ranging from 86% of average on the Bear River basin above Harer to 107% on the Malad basin. Apr-Sept streamflow forecasts have been increased from a month ago on Montpelier Creek and the Cub River, but have been reduced on the Bear River at Harer. Forecasts now range from 73 to 89% of average. Reservoir storage remains low with Bear Lake reporting 83% of normal storage (58% of capacity) and Montpelier Creek Reservoir showing only 35% of normal (15% of capacity).

GREAT BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	WET SUBS. (1000AF)	DRY SUBS. (1000AF)	REAS. MAX. (1000AF)	REAS. MIN. (1000AF)	25 YR. AVG. (1000AF)
BEAR nr Harer	APR-SEP	225	73	255	215	365	86	310
MONTPELIER CK nr Montpelier	APR-SEP	12.0	86	12.8	11.2	17.3	6.7	13.9
CUB nr Preston	APR-SEP	46	89	54	40			52
	APR-JUL	42	90	49	36	56	28	47

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE THIS YEAR	LAST YEAR	** AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE	
BEAR LAKE	1421.0	826.4	1036.2	992.5	Bear River (above Harer)	12	126	86
MONTPELIER CREEK	4.0	0.6	1.2	1.7	Montpelier Creek	6	118	89
					Mink Creek	5	144	98
					Cub River	4	158	106
					Malad River	7	186	107

WET SUBS. and DRY SUBS. represent 130 and 70 percent subsequent precipitation events respectively.
 REAS. MAX. and REAS. MIN. forecasts are for 10% and 90% exceedance levels with the exception of (1) below.
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SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85														
UPPER COLUMBIA BASIN							WATERSHED I							CLEARWATER BASIN							WATERSHED II						
ABOVE BURKE	4100	2/27/89	---	15.2E	12.4	19.0	BREEZY SADOLE	5010	3/03/89	81	24.0	19.6	27.7														
ABOVE ROLANO	4350	2/27/89	---	20.5E	15.3	27.0	CAYUSE AIRSTRIP	3500	3/03/89	44	11.4	8.1	11.2														
BEAR MOUNTAIN	5400	2/24/89	109	43.6	32.6	53.0	COOL CREEK	6250	3/03/89	124	39.4	30.2	42.6														
BEAR MTN	5400	3/01/89	---	41.6	30.4	53.8	COOL CREEK	6280	3/01/89	---	36.8	29.6	40.1														
BENTON MEADOW	2370	2/27/89	21	6.5	4.0	6.0	CRATER MEADOWS	5960	3/03/89	108	34.9	27.2	38.0														
BENTON SPRING	4920	2/27/89	51	16.4	10.4	17.2	CRATER MDWS	5960	3/01/89	---	36.0	27.9	40.0														
BREEZY SADDLE	5010	3/03/89	81	24.0	19.6	27.7	CROOKED FORK	3610	3/03/89	46	14.0	10.8	11.9														
CHILCO RIDGE	3650	3/08/89	---	10.7E	2.7	6.2	ELK BUTTE	5550	3/01/89	---	33.9	21.4	37.2														
CONIE RIDGE	3900	3/08/89	38	12.4	3.3	7.4	FISH LAKE AIRSTRIP	5650	3/03/89	102	30.8	28.6	34.7														
COPPER RIDGE	4820	3/01/89	---	20.0E	15.5	23.8	FORTY-NINE MEADOWS	4830	3/03/89	---	23.3E	19.1	26.3														
CORNER CREEK	3150	3/08/89	37	12.4	6.2	6.6	HEMLOCK BUTTE	5810	3/03/89	122	38.9	27.5	42.7														
EAST RAGGEO SADDLE	3740	3/04/89	72	19.0	13.4	18.0	HEMLOCK BUTTE PILLOW	5810	3/01/89	---	41.7	26.9	42.8														
EAST TWIN	4130	3/01/89	46	15.7	5.7	9.9	HOOOON BASIN PILLOW	6050	3/01/89	---	32.2	27.6	41.4														
FORTY-NINE MEADOWS	4830	3/03/89	---	23.3E	19.1	26.3	HOOOON CREEK	5900	2/25/89	88	31.6	28.9	40.7														
FOURTH OF JULY SUM	3200	2/27/89	39	11.8	6.2	8.2	KIT CARSON PASTURE	4950	2/26/89	31	8.7	8.4	7.8														
HUMBOLDT GULCH	4250	2/27/89	42	11.5	10.4	14.2	LOLO PASS	5240	3/02/89	74	21.2	18.2	26.6														
HUMBOLDT GLCH PILLOW	4250	3/01/89	---	10.9	7.6	13.2	LOLO PASS	5240	3/01/89	---	22.6	20.3	28.8														
KELLOGG PEAK	5560	2/26/89	73	22.9	18.2	27.3	LOST LAKE	6110	3/03/89	120	41.0	30.1	48.9														
LOOKOUT	5140	3/01/89	79	22.4	18.4	29.5	LOST LAKE	6110	3/01/89	---	44.2	31.3	55.0														
LOOKOUT	5140	3/01/89	---	23.6	17.7	28.4	MOUNTAIN MEADOWS	6360	2/27/89	---	15.0E	14.1	20.8														
LOST LAKE	6110	3/03/89	120	41.0	30.1	48.9	MOUNTAIN MOWS PILLOW	6360	3/01/89	---	17.5	16.3	23.2														
LOST LAKE	6110	3/01/89	---	44.2	31.3	55.0	NEZ PERCE PASS	6570	2/26/89	48	14.4	13.6	15.0														
LOWER SANDS CREEK	3120	3/08/89	---	20.9E	13.3	16.8	PIERCE R.S.	3080	2/28/89	45	14.5	7.4	10.0														
MOSCOW MOUNTAIN	4410	3/01/89	64	22.8	---	14.9	SAVAGE PASS	6170	3/02/89	75	21.0	18.6	23.3														
MOSQUITO RIDGE	5200	2/26/89	94	30.1	21.9	33.7	SAVAGE PASS PILLOW	6170	3/01/89	---	20.9	18.7	24.6														
MOSQUITO	5200	3/01/89	---	30.0	20.4	34.0	SHANGHAI SUMMIT	4570	3/03/89	93	29.2	14.4	23.4														
ROLANO SUMMIT	5120	2/26/89	---	25.9E	15.3	32.8	SHANGHAI SUM PILLOW	4570	3/01/89	---	29.9	15.3	24.8														
SAGE CREEK SADDLE	4080	3/08/89	65	21.0	9.5	16.1	SHERWIN	3200	2/28/89	54	17.3	8.3	12.3														
SCHWEITZER BASIN	6090	2/28/89	100	37.8	31.1	40.4	SHERWIN	3200	3/01/89	---	16.1	7.5	11.5														
SCHWEITZER BOWL	4800	2/28/89	72	25.5	18.3	27.2	TWIN LAKES	6510	2/26/89	85	30.6	28.1	36.5														
SCHWEITZER RIDGE	6200	2/28/89	94	35.0	28.5	40.1	WEBB CREEK	4720	2/27/89	35	10.2	5.7	8.8														
SHERWIN	3200	2/28/89	54	17.3	8.3	12.3																					
SHERWIN	3200	3/01/89	---	16.1	7.5	11.5	WEISER, PAYETTE, AND BOISE BASINS							WATERSHED IV													
SKITWISH RIDGE	5110	3/03/89	90	27.2	18.9	30.2	ATLANTA SUMMIT	7600	2/28/89	78	26.8	19.8	30.2														
SUNSET	5540	2/26/89	84	22.7	17.0	28.1	ATLANTA SUM PILLOW	7580	3/01/89	---	24.0	18.1	27.4														
SUNSET	5540	3/01/89	84	25.6	18.0	30.8	ATLANTA TOWNSITE	5370	2/27/89	30	9.6	6.9	---														
TWIN SPIRIT OVIDE	3480	3/04/89	60	16.4	9.6	12.2	BANNER SUMMIT	7040	2/27/89	61	20.7	15.8	25.8														
WEST TWIN	4220	3/01/89	49	16.9	3.7	8.8	BANNER SUMMIT PILLOW	7040	3/01/89	---	19.5	15.6	23.2														
							BAD BEAR	4940	3/01/89	42	15.2	8.2	13.1														
							BEAR BASIN	5350	2/25/89	53	17.8	11.5	17.6														
							BEAR BASIN	5350	3/01/89	---	17.0	10.6	17.6														
							BEAR SADDLE	6180	3/01/89	80	29.0	13.6	27.9														
							BEAR SADDLE PILLOW	6180	3/01/89	---	25.9	13.5	27.8														
							BIG CREEK SUMMIT	6580	2/25/89	81	27.9	21.7	31.5														
							BIG CREEK SUM PILLOW	6580	3/01/89	---	25.5	18.3	28.0														
							BOGUS BASIN	6340	3/02/89	76	25.3	12.8	20.9														
							BOGUS BASIN ROAD	5540	3/02/89	37	12.4	1.9	5.8														
							BOULDER CREEK	5440	3/01/89	---	16.5E	12.1	21.1														
							BRUNDAGE MOUNTAIN	7560	2/27/89	---	32.3E	27.1	40.1														
							CAMAS CREEK DIVIDE	5710	2/25/89	47	15.5	6.9	10.6														
							CHIMNEY CREEK	6400	2/25/89	44	14.4	8.0	13.9														
							COUCH SUMMIT	6840	2/25/89	---	15.8E	8.1	16.7														
							COZY COVE	5380	2/27/89	37	11.3	7.8	14.8														
							COZY COVE	5380	3/01/89	---	12.1	---	---														
							CRAWFORD R.S.	4860	2/25/89	31	9.1	4.3	7.4														
							DEAOWAN GULCH	5600	2/28/89	58	19.7	12.3	15.1														
							DEAOWOOD AIRSTRIP	5360	2/27/89	---	11.5E	8.0	14.3														
							DEAOWOOD SUMMIT	6860	2/27/89	91	32.4	26.9	40.2														
							DOLLARHIDE SUMMIT	8420	2/28/89	58	19.6	13.1	20.9														
							DOLLARHIDE SM PILLOW	8420	3/01/89	---	19.0	13.4	21.3														
							GRAHAM GUARD STATION	5690	2/27/89	36	11.1	9.9	14.9														
							GRAHAM G.S. PILLOW	5690	3/01/89	---	11.4	8.8	16.8														
							IOAHO CITY TOWNSITE	4000	3/01/89	17	6.6	2.1	4.5														
							JACKSON PEAK	7070	2/27/89	66	22.9	16.2	26.8														
							LAKE FORK	5290	2/25/89	44	13.1	7.2	14.3														
							LITTLE CAMAS FLAT	4940	2/25/89	32	9.0	5.1	6.2														
							MANN CREEK	6080	3/01/89	75	25.0	14.1	21.8														
							MOORES CREEK SUMMIT	6100	3/01/89	75	27.4	19.2	28.2														
							MOORES CK SUM PILLOW	6100	3/01/89	---	26.9	20.4	29.6														
							PLACER CREEK	5860	2/28/89	54	15.2	10.0	16.2														
							PRAIRIE	4800	2/26/89	31	9.0	4.6	5.4														
							PRAIRIE	4800	3/01/89	---	5.7	3.4	---														
							ROAO CREEK	5380	2/28/89	30	9.2	6.7	9.2														
							ROBINSON CREEK RIDGE	6220	3/01/89	77	25.8	12.9	18.0														
							ROCK FLAT SUMMIT	5310	3/01/89	---	16.4E	10.4	16.6														
							SECESH SUMMIT	6520	2/27/89	70	25.2	21.0	30.8														
							SECESH SUMMIT PILLOW	6520	3/01/89	---	23.7	21.0	31.2														
							SOLOIER R.S.	5740	2/25/89	41	12.0	6.2	11.6														
							SOLOIER R.S. PILLOW	4330	3/01/89	---	13.2	6.3	---														
							SQUAW FLAT	6240	2/27/89	57	17.9	14.6	22.9														
							SQUAW FLAT PILLOW	6240	3/01/89	---	16.8	13.6	20.4														
							SQUAW MEADOW	5900	2/27/89	69	24.7	21.2	31.4														
							STURGILL RIDGE	6680	3/01/89	82	27.8	16.3	26.6														
							THORSON CABIN	5320	3/01/89	67	24.4	8.6	13.4														
							TRINITY MOUNTAIN	7770	2/28/89	87	34.0	25.2	37.0														
							TRINITY MTN. PILLOW	7770	3/01/89	---	31.0	23.6	35.7														
							TRIPOD SUMMIT	5260	2/25/89	59	18.6	11.3	16.6														
							VIENNA MINE	8960	2/27/89	78	27.7	19.9	31.2														
							VIENNA MINE	8960	3/01/89	---	22.9	20.2	31.1														
							WEST BRANCH	5560	2/28/89	56	18.2	13.5	22.9														
							WEST BRANCH																				

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
BIG WOOD, LITTLE WOOD, BIG LOST, AND LITTLE LOST BASINS							WILLOW, BLACKFOOT, UPPER SNAKE, AND PORTNEUF BASINS						
WATERSHED V							WATERSHED VI						
BEAR CANYON	7900	2/27/89	50	13.8	9.4	15.4	ASPEN GROVE	6500	3/03/89	---	13.0E	8.2	11.0
BEAR CANYON PILLOW	7900	3/01/89	---	12.0	9.1	13.9	AUSTIN BROTHERS RNCH	6400	3/01/89	---	8.6E	5.9	8.6
CAMAS CREEK DIVIDE	5710	2/25/89	47	15.5	6.9	10.6	BEAVEROAM CREEK	6120	2/26/89	28	8.0	5.7	8.3
CHIMNEY CREEK	6400	2/25/89	44	14.4	8.0	13.9	BIG SPRINGS	6400	2/27/89	59	20.2	12.2	18.4
COPPER BASIN	7640	2/27/89	29	7.3	3.9	8.1	BIRCH CREEK	6800	2/28/89	40	12.8	7.5	10.2
COUCH SUMMIT	6840	2/25/89	---	15.8E	8.1	16.7	BLACK BEAR	7950	2/23/89	102	38.6	29.7	35.0
OOLLARHIOE SUMMIT	8420	2/28/89	58	19.6	13.1	20.9	BLACK CANYON	7960	2/28/89	99	32.7	24.7	---
OOLLARHIOE SM PILLOW	8420	3/01/89	---	19.0	13.4	21.3	BLACK MOOSE	8160	2/27/89	---	40.5E	26.6	34.9
ORY FORK	7220	2/27/89	48	13.8	8.0	14.4	BLUE LEOGE MINE	6900	3/01/89	---	18.8E	9.5	14.3
FISHPOLE LAKE	9300	2/27/89	47	15.8	12.3	17.0	BLUE RIDGE	6780	2/28/89	63	22.7	12.2	16.9
GALENA	7440	3/01/89	---	13.6E	8.8	16.6	BONE	6200	2/28/89	27	9.3	5.2	7.3
GALENA PILLOW	7440	3/01/89	---	12.9	10.1	16.4	BROCKMAN STATION	6430	2/28/89	42	13.1	7.5	9.7
GALENA NEW	7470	3/01/89	52	15.0	9.5	18.3	CAMP CREEK	6580	3/01/89	37	10.4	5.0	9.2
GALENA SUMMIT	8780	3/01/89	53	14.9	12.1	20.2	COULTER CREEK	7020	2/24/89	58	17.3	15.6	19.9
GALENA SUMMIT PILLOW	8780	3/01/89	---	13.9	11.6	16.2	COLO SPRINGS	7000	2/25/89	64	21.9	13.3	20.3
GARFIELD R.S.	6560	2/27/89	35	9.4	4.9	9.9	CRAB CREEK	6860	2/28/89	54	16.8	8.5	13.9
GARFIELD R.S. PILLOW	6560	3/01/89	---	9.5	5.5	9.9	CRAB CREEK PILLOW	6860	3/01/89	---	17.1	8.9	14.4
GRAHAM RANCH	6270	3/01/89	44	11.7	5.7	12.6	EAST CREEK	7000	2/26/89	38	10.9	8.2	9.9
HILTS CREEK	8000	2/27/89	38	9.3	6.6	9.4	FALL CREEK	6820	2/28/89	36	11.0	4.7	8.8
HILTS CREEK PILLOW	8000	3/01/89	---	10.3	9.7	11.3	GRASSY LAKE	7270	2/27/89	91	31.9	26.9	30.3
HYNOMAN CREEK	7440	2/27/89	44	11.3	7.7	12.7	GRASSY LAKE PILLOW	7270	3/01/89	---	29.4	24.0	31.0
HYNOMAN PILLOW	7440	3/01/89	---	10.5	8.3	11.4	INDIAN MEADOWS	9420	2/28/89	96	32.8	28.0	31.9
IRON BOG	7650	2/24/89	44	10.0	7.3	12.4	IRVING CREEK	7040	2/27/89	22	6.1	4.2	4.9
IRON MINE CREEK	6300	2/27/89	40	10.6	5.0	10.1	ISLAND PARK	6290	2/27/89	58	18.7	10.0	15.2
LEA BELT	6700	2/24/89	32	7.4	3.8	8.5	ISLAND PARK PILLOW	5290	3/01/89	---	15.7	10.6	14.7
LITTLE CAMAS FLAT	4940	2/25/89	32	9.0	5.1	6.2	JACKPINE CREEK	7350	2/28/89	62	19.4	15.3	19.8
LOST-WOOD DIVIDE	7900	2/27/89	59	18.0	13.4	19.8	JOHNSON CREEK	6730	2/27/89	36	10.9	9.2	12.0
LOST-WOOD OVO PILLOW	7900	3/01/89	---	17.2	12.6	20.5	KILGORE	6320	2/26/89	42	13.1	6.8	10.7
MASCOT MINE	7780	3/01/89	---	11.3E	6.2	12.9	LATHAM SPRINGS	7630	2/28/89	93	32.6	23.5	28.9
MOONSHINE	7440	2/28/89	35	8.6	6.6	9.0	LAVA CREEK	7350	2/28/89	56	18.0	9.8	14.0
MOONSHINE PILLOW	7440	3/01/89	---	8.5	7.4	9.4	LOWER PEBBLE	5780	2/25/89	40	12.3	9.8	12.1
MOUNT BALOY	8920	2/27/89	55	16.8	10.7	18.1	LUCKY DOG	6860	2/28/89	76	26.2	17.9	27.9
MULDOON	6320	2/27/89	23	6.0	3.7	7.4	MAISON PLATEAU	7750	2/23/89	72	25.7	16.7	19.3
SAWMILL CANYON	7000	2/28/89	27	6.2	5.2	7.0	MC RENOLDS RESERVOIR	6720	2/28/89	52	15.9	11.3	17.4
SOLOTER R.S.	5740	2/25/89	41	12.0	6.2	11.6	MINK CREEK	6410	2/25/89	57	16.5	9.7	16.0
SOLOTER R.S. PILLOW	4330	3/01/89	---	13.2	6.3	---	MUO CREEK	7100	3/03/89	87	26.8	13.4	16.9
STICKNEY MILL	7430	2/27/89	31	7.5	3.9	8.2	NORTH PUTNAM	7240	2/28/89	71	24.3	---	25.5
STICKNEY MILL PILLOW	7430	3/01/89	---	6.5	3.2	7.5	PACKSADOLE SPRING	8200	2/28/89	78	29.1	19.7	24.7
SWEDE PEAK	7640	2/27/89	53	15.5	8.3	15.2	PEBBLE CREEK	6550	2/25/89	45	15.0	9.1	14.4
SWEDE PEAK PILLOW	7640	3/01/89	---	14.3	8.3	13.4	PHILLIPS BENCH	8200	2/27/89	81	26.4	19.7	25.5
TELFER RANCH	5840	2/27/89	33	9.8	3.6	7.9	PHILLIPS BENCH PILL.	8200	3/01/89	---	25.8	17.6	23.7
VIENNA MINE	8960	2/27/89	78	27.7	19.9	31.2	PINE CREEK PASS	6810	2/28/89	50	15.8	13.2	15.4
VIENNA MINE PILLOW	8960	3/01/89	---	22.9	20.2	31.1	PUTNAM	7220	2/25/89	59	21.2	8.5	18.5
WET CREEK SUMMIT	7680	2/27/89	38	9.6	8.7	10.0	SAWTELL MOUNTAIN	8720	2/27/89	93	34.5	22.7	28.8
							SEOGWICK PEAK	7850	2/26/89	50	16.8	10.4	16.0
							SHEEP MOUNTAIN	6570	3/03/89	51	14.6	8.4	12.0
							SHEEP MTN PILLOW	6570	3/01/89	---	16.1	9.2	13.8
							SLUG CREEK DIVIDE	7230	2/27/89	40	11.9	9.8	14.7
							SLUG CK OVO PILLOW	7230	3/01/89	---	12.4	10.9	16.7
							SOMSEN RANCH	6840	3/01/89	45	13.8	9.7	12.9
							SOMSEN RANCH PILLOW	6800	3/01/89	---	11.4	7.6	12.4
							STATE LINE	6660	2/28/89	44	13.3	11.1	12.7
							SULPHUR PEAK	7070	2/27/89	---	12.4E	10.1	14.2
							TARGHEE PASS	6980	2/27/89	---	14.9E	8.5	12.9
							TETON PASS W.S.	7740	2/27/89	79	27.4	17.0	22.4
							TEX CREEK	6650	2/28/89	---	10.3E	6.1	8.6
							TOPONCE	6160	2/25/89	48	15.2	11.6	14.6
							TWITCHELL CANYON	6300	2/28/89	52	18.8	11.2	14.4
							VALLEY VIEW	6680	2/27/89	53	16.7	9.4	14.8
							WEBBER CREEK	6700	2/27/89	26	6.5	3.8	4.8
							WHISKEY CREEK	6800	2/23/89	67	22.5	11.6	17.7
							WHITE ELEPHANT	7710	2/27/89	72	24.9	15.9	21.5
							WHITE ELEPHANT PILL	7710	3/01/89	---	26.7	17.2	22.6
							WILHORSE DIVIDE	6490	2/25/89	52	16.6	9.1	15.0
							WILHORSE OVO PILLOW	6490	3/01/89	---	16.8	9.0	14.2
							WOOD CANYON DIVIDE	7450	2/27/89	---	15.1E	10.3	16.4

SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	OATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
SOUTHSIOE SNAKE BASIN							WATERSHEO VII						
ANTELOPE RIOGE	6180	2/26/89	29	9.9	3.3	6.8	GREAT BASIN						
BAOGER CULCH	6660	2/27/89	43	14.8	7.8	11.3	CHRISTENSEN RANCH	5560	2/21/89	40	9.8	--	8.5
BEAR CREEK	7800	2/27/89	64	22.9	13.2	18.2	CLIFF CANYON	7200	2/21/89	30	7.4	3.3	8.7
BEAR CK SNOTEL	7800	3/01/89	---	21.0	13.0	18.1	CUB RIVER R.S.	5450	2/21/89	39	9.9	6.3	8.6
BIG BENO	6700	2/27/89	33	10.2	7.2	8.0	OANIELS CREEK	6270	2/21/89	31	7.4	4.0	5.9
BOSTETTER R.S.	7500	2/27/89	52	18.1	12.6	17.8	DRY BASIN	7820	2/21/89	69	21.3	15.9	24.9
BOSTETTER RS PILLOW	7500	3/01/89	---	18.1	9.8	16.0	ORY CREEK FLAT	6360	2/21/89	34	9.5	5.9	7.9
BOY SCOUT CAMP	7740	2/27/89	45	14.2	10.4	13.4	EMIGRANT SUMMIT	7390	2/27/89	59	19.7	14.6	21.9
CEDAR CREEK	6820	2/27/89	34	11.2	6.8	9.4	EMIGRANT SUM PILLOW	7390	3/01/89	---	17.6	12.6	25.3
CLEAR CREEK MEADOWS	9420	2/27/89	62	20.7	13.6	19.3	EMIGRATION CANYON	6500	2/27/89	34	9.8	7.7	9.9
COLUMBIA BASIN AM	6650	2/28/89	31	9.9	5.9	8.4	FRANKLIN BASIN	8020	2/21/89	63	20.0	13.8	21.7
DEAOLINE	7400	2/27/89	48	17.5	9.5	19.1	FRANKLIN BSN PILLOW	8040	3/01/89	---	22.2	15.3	26.3
DEAOLINE SOUTH	7450	2/27/89	50	18.9	11.9	21.1	GIVEOUT	6860	2/28/89	38	10.3	9.4	11.0
FAWN CREEK AM	7050	2/27/89	49	15.7	--	7.9	GIVEOUT PILLOW	6840	3/01/89	---	9.9	9.8	11.8
FOX CREEK	6800	2/27/89	32	11.1	8.4	9.9	GIVEOUT NEW	6930	2/28/89	33	9.0	9.2	9.9
FRY CANYON	6700	2/27/89	25	7.5	6.6	6.7	LIBERTY SPRING	8600	2/21/89	96	32.2	22.3	33.2
GEORGE CREEK	8840	2/27/89	59	19.1	12.2	18.1	LITTLE BEAVER	6790	3/01/89	---	12.0E	10.8	13.8
GOAT CREEK	8800	2/27/89	48	15.6	11.5	16.0	LOWER ELKHORN	6960	2/21/89	43	12.3	6.6	13.1
GOLO CREEK	6600	2/27/89	23	6.6	4.4	5.2	LOWER HOME CANYON	7640	2/27/89	---	11.0E	8.9	12.0
HOWELL CANYON	7980	2/27/89	69	25.1	16.6	22.9	MONTPELIER CREEK	6540	3/01/89	---	7.0E	6.2	7.7
HOWELL CANYON PILLOW	7980	3/01/89	---	22.1	13.3	19.0	OXFORD MOUNTAIN	6800	2/21/89	44	13.4	6.1	9.7
HUMMINGBIO SPRINGS	8950	2/27/89	65	21.0	15.6	20.2	OXFORD SPRING	6740	2/21/89	44	12.5	6.1	10.8
INOIAN GROVE	7560	2/27/89	38	11.5	5.6	11.1	OXFORD SPRING PILLOW	6740	3/01/89	---	11.8	6.1	12.7
JACK CREEK, LOWER	6800	2/27/89	15	5.0	5.4	4.6	STRAWBERRY CREEK	5820	2/27/89	39	13.0	7.4	10.2
JACKS PEAK	8420	2/27/89	73	23.7	16.3	20.3	STRAWBERRY-MINK DVO	6720	2/21/89	66	20.7	14.2	19.0
LANGFORD FLAT CREEK	5980	2/27/89	25	8.4	5.8	5.8	UPPER ELKHORN	7140	2/21/89	50	14.9	9.6	16.4
LAUREL ORAW	6700	2/27/89	32	10.4	6.3	7.7	UPPER HOME CANYON	8560	2/27/89	59	18.3	13.6	20.4
LOGGER SPRINGS	8120	2/27/89	50	15.5	11.0	16.5	WILLOW FLAT	6070	2/21/89	59	17.5	10.5	14.3
MAGIC MOUNTAIN	6880	2/27/89	52	17.9	11.8	16.9	WORM CREEK	6620	2/21/89	61	17.6	10.6	17.0
MAGIC MTN PILLOW	6880	3/01/89	---	19.6	11.5	16.9							
MERRIT MOUNTAIN AM	7000	2/28/89	34	10.5	3.4	5.2							
MUO FLAT	5730	2/26/89	27	8.9	4.2	6.1							
MUO FLAT PILLOW	5730	3/01/89	---	8.3	3.6	5.8							
ONE MILE SUMMIT	7330	2/27/89	12	3.3	3.0	6.0							
POLE CREEK R.S.	8330	2/27/89	51	17.1	14.6	17.4							
ROOEO FLAT	6800	2/27/89	26	8.0	5.4	5.9							
SEVENTYSIX CREEK	7100	2/27/89	35	11.2	7.2	11.3							
SEVENTYSIX CK SNOTEL	7100	3/01/89	---	10.8	5.4	9.5							
SHOSHONE BASIN	5810	2/27/89	---	7.9E	5.6	5.5							
SILVER CITY	6400	2/28/89	55	20.3	10.7	14.1							
SOUTH MOUNTAIN	6500	2/26/89	54	20.6	10.2	12.6							
SOUTH MTN PILLOW	6500	3/01/89	---	28.9	10.7	12.2							
SUBLETT	5950	2/28/89	36	10.4	6.5	10.5							
TAYLOR CANYON	6200	2/27/89	25	8.1	4.2	5.0							
TOE JAM AM	7700	2/28/89	34	11.2	7.8	9.2							
VIPONT	7670	2/27/89	43	13.0	8.1	13.4							
WILSON CREEK	7500	2/27/89	46	15.5	8.5	11.4							
							WATERSHEO VIII						

The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

State

Idaho Department of Water Resources
Soil and Water Conservation Districts of Idaho

Federal

U.S. Department of Agriculture
Forest Service
U.S. Department of Army
Corps of Engineers
U.S. Department of Commerce
NOAA, National Weather Service
U.S. Department of Interior
Bureau of Reclamation
Geological Survey, Water Resources Division
Shoshone-Bannock Tribal Council

Local

Big Lost River Irrigation District
Big Wood Irrigation Company
Boise Project Board of Control
Idaho Water District #01
Lewiston Orchards Irrigation District
Little Wood River Irrigation District
North Board of Control — Owyhee Project
Salmon Falls Irrigation Company
South Board of Control — Owyhee Project

Private

Cyprus Mining Company
FMC Corporation
Idaho Power Company
Le Bois Resort
Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

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SOIL CONSERVATION SERVICE

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